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Reviewer: Durreshwar Anjum

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Application No: 10528104 Version No: 2.0

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# SEQUENCE LISTING

<110> HEINZEL, THORSTEN  
 KRAEMER, OLIVER H.  
 GOETTLICHER, MARTIN  
 ZHU, PING  
 GOLEBIEWSKI, MARTIN  
 PELICCI, PIER  
 MAURER, ALEXANDER  
 HENTSCH, BERND  
 MINUCCI, SAVERIO

<120> THE USE OF MOLECULAR MARKERS FOR THE PRECLINICAL AND  
 CLINICAL PROFILING OF INHIBITORS OF ENZYMES HAVING  
 HISTONE DEACETYLASE ACTIVITY

<130> LEDER-15

<140> 10528104

<141> 2005-09-28

<150> PCT/EP03/10404

<151> 2003-09-18

<150> EP 02021228.8

<151> 2002-09-18

<160> 16

<170> PatentIn Ver. 3.3

<210> 1

<211> 488

<212> PRT

<213> Homo sapiens

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Pro His Arg Ile Arg Met Thr His Asn Leu Leu Leu Asn Tyr Gly Leu  
 35 40 45

Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys Ala Thr Ala Glu Glu  
 50 55 60

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 65 70 75 80

Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln Met His Ile Phe Asn  
 85 90 95

Val Gly Glu Asp Cys Pro Ala Phe Asp Gly Leu Phe Glu Phe Cys Gln

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Gln Thr Asp Met Ala Val Asn Trp Ala Gly Gly Leu His His Ala Lys				
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		165		170
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Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp				
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Val Lys Thr Phe Asn Leu Pro Leu Leu Met Leu Gly Gly Gly Tyr				
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Leu Asp Cys Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp Tyr Phe Glu				
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				335
Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr				
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Asn Gln Asn Thr Pro Glu Tyr Met Glu Lys Ile Lys Gln Arg Leu Phe				
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Arg Asn Val Ala Asp His Lys Lys Gly Ala Lys Lys Ala Arg Ile Glu		
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Glu Asp Lys Lys Glu Thr Glu Asp Lys Lys Thr Asp Val Lys Glu Glu		
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Gly Val Trp Lys Val Arg Val Asp Leu Pro Asp Lys Tyr Pro Phe Lys		
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Ala Leu Tyr Asp Leu Thr Asn Ile Phe Glu Ser Phe Leu Pro Gln Leu		
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Leu Ala Tyr Pro Asn Pro Ile Asp Pro Leu Asn Gly Asp Ala Ala Ala		
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Met Tyr Leu His Arg Pro Glu Glu Tyr Lys Gln Lys Ile Lys Glu Tyr		
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Ile Gln Lys Tyr Ala Thr Glu Glu Ala Leu Lys Glu Gln Glu Glu Gly		
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<212> PRT

<213> Homo sapiens

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Tyr Gln Phe Val Asn Asn Leu Ser Glu Glu Asp Tyr Arg Leu Met Arg  
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Asp Asn Asn Leu Leu Gly Thr Pro Gly Glu Ser Thr Glu Glu Glu Leu  
50 55 60

Leu Arg Arg Leu Gln Gln Ile Lys Glu Gly Pro Pro Pro Gln Asn Ser  
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Asp Glu Asn Arg Gly Gly Asp Ser Ser Asp Asp Val Ser Asn Gly Asp  
85 90 95

Ser Ile Ile Asp Trp Leu Asn Ser Val Arg Gln Thr Gly Asn Thr Thr  
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Arg Ser Gly Gln Arg Gly Asn Gln Ser Trp Arg Ala Val Cys Arg Thr  
115 120 125

Asn Pro Asn Ser Gly Asn Phe Arg Phe Ser Leu Glu Ile Asn Val Tyr  
130 135 140

Ser Asn Asn Gly Ser Gln Asn Ser Glu Asn Glu Asn Glu Pro Ser Ala  
145 150 155 160

Arg Arg Ser Ser Gly Glu Asn Val Glu Asn Asn Ser Gln Arg Gln Val  
165 170 175

Glu Asn Pro Arg Ser Glu Ser Thr Ser Ala Arg Pro Ser Arg Ser Glu  
180 185 190

Arg Asn Ser Thr Glu Ala Leu Thr Glu Val Pro Pro Thr Arg Gly Gln  
195 200 205

Arg Arg Ala Arg Ser Arg Ser Pro Asp His Arg Arg Thr Arg Ala Arg  
210 215 220

Ala Glu Arg Ser Arg Ser Pro Leu His Pro Met Ser Glu Ile Pro Arg  
225 230 235 240

Arg Ser His His Ser Ile Ser Ser Gln Thr Phe Glu His Pro Leu Val  
245 250 255

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Ala	Ser	Gly	Glu	Ser	Thr	Gly	Ser	Gly	Gln	Arg	Pro	Pro	Thr	Ile	Val	
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Asp	Ser	Ile	Ala	Ser	Arg	Thr	Arg	Ser	Arg	Ser	Gln	Thr	Pro	Asn	Asn	
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Thr	Val	Thr	Tyr	Glu	Ser	Glu	Arg	Gly	Gly	Phe	Arg	Arg	Thr	Phe	Ser	
			355						360			365				
Arg	Ser	Glu	Arg	Ala	Gly	Val	Arg	Thr	Tyr	Val	Ser	Thr	Ile	Arg	Ile	
			370						375			380				
Pro	Ile	Arg	Arg	Ile	Leu	Asn	Thr	Gly	Leu	Ser	Glu	Thr	Thr	Ser	Val	
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Ala	Ile	Gln	Thr	Met	Leu	Arg	Gln	Ile	Met	Thr	Gly	Phe	Gly	Glu	Leu	
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Ser	Tyr	Phe	Met	Tyr	Ser	Asp	Ser	Asp	Ser	Glu	Pro	Thr	Gly	Ser	Val	
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Ser	Gly	Gly	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	
			450						455			460				
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			465						470			475			480	
Ser	Gly	Gly	Glu	Ser	Ser	Glu	Thr	Ser	Ser	Asp	Leu	Phe	Glu	Gly	Ser	
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Arg	His	Arg	Ala	Pro	Val	Thr	Phe	Asp	Glu	Ser	Gly	Ser	Leu	Pro	Phe	
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Phe Gly Glu Asn Asp Ala Leu Lys Thr Cys Ser Val Cys Ile Thr Glu  
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Tyr Thr Glu Gly Asn Lys Leu Arg Lys Leu Pro Cys Ser His Glu Tyr  
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His Val His Cys Ile Asp Arg Trp Leu Ser Glu Asn Ser Thr Cys Pro  
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Ile Cys Arg Arg Ala Val Leu Ala Ser Gly Asn Arg Glu Ser Val Val  
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<211> 281

<212> PRT

<213> Homo sapiens

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Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys  
35 40 45

Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr  
50 55 60

Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val  
65 70 75 80

Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile Leu Arg Thr Ser  
85 90 95

Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln Asn Ile Ser Pro  
100 105 110

Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly  
115 120 125

Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu  
130 135 140

Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly  
145 150 155 160

His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile  
165 170 175

His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe



180

185

190

Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln  
 195 200 205

Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys  
 210 215 220

Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr  
 225 230 235 240

Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile  
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Phe Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala  
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Ser Phe Phe Gly Ala Phe Leu Val Gly  
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&lt;211&gt; 1985

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5

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gaacaccata tgaaggcgga gtatggaaaag ttagagtgga cctacctgat aaataccctt 240
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caggaactgt gtgtctagat gtaattaatc aaacttggac agctctctat gatcttacca 360
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